CLAIMS

1. A method of making a part of a droplet plate, which part mounts to a substrate that carries a heat transducer and defines both a firing chamber to surround the transducer and a nozzle through which liquid in the chamber may pass from the chamber; the method comprising the steps of:

forming the part from a single type of dielectric material by depositing a first layer of the dielectric material;

shaping the firing chamber in the first layer;

depositing a second layer of the single type of dielectric material; and

making the nozzle in the second layer.

2. The method of claim 1 wherein forming includes depositing the dielectric material using plasma-enhanced chemical vapor deposition.

3. The method of claim 1 wherein the first layer and second layer of dielectric material are selected from the group consisting of silicon dioxide, silicon nitride, silicon carbide, amorphous silicon, silicon oxynitride and diamondlike carbon.

4. The method of claim 3 wherein the first layer of dielectric material and the second layer of dielectric material is selected to be the same material.

5. A method of making a part of a droplet plate, which part mounts to a substrate that carries a heat transducer and defines both a firing chamber to surround the transducer and a nozzle through which liquid in the chamber may pass from the chamber; the method comprising the steps of:

forming the part from a first dielectric material by depositing a first layer of the dielectric material;

shaping the firing chamber in the first layer; then

depositing a second layer of the first dielectric material; and

making the nozzle in the second layer.

6. The method of claim 5 wherein the first layer of dielectric material are selected from the group consisting of silicon dioxide, silicon nitride, silicon carbide, amorphous silicon, silicon oxynitride and diamondlike carbon

7. The method of claim 5 including the step of simultaneously exposing the first and second layers to one of an etchant or solvent.

8. The method of claim 5 wherein the first dielectric material comprises silicon dioxide.